IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A stacked connection comprising:

first, second and third circuit boards having respective overlapping portions, said first circuit board comprising a substrate supporting first and second sets of electrical conductors, said second circuit board comprising a substrate supporting first and second sets of electrical conductors, and said third circuit board comprising a substrate supporting a first set of electrical conductors,

wherein said second set of electrical conductors of said second circuit board are respectively in contact with said second set of electrical conductors of said first circuit board, and said first set of electrical conductors of said third circuit board are respectively electrically coupled to said first set of electrical conductors of said first circuit board by way of said first set of electrical conductors of said second circuit board, wherein each of said first set of electrical conductors of said second circuit board comprises a first pad on one side of said substrate of said second circuit board, a second pad on another side of said substrate of said second circuit board, and a via through said substrate of said second circuit board that electrically connects said first pad to said second pad.

2. (canceled)

3. (original) The stacked connection as recited in claim 1, wherein a first portion of said second circuit board is bonded to a portion of said first circuit board, and a portion of said third circuit board is bonded to a second portion of said second circuit board.

4. (original) The stacked connection as recited in claim 1, wherein a first portion of said second circuit board is soldered to a portion of said first circuit board, and

a portion of said third circuit board is soldered to a second portion of said second circuit board.

5. (original) The stacked connection as recited in claim 1, further comprising a clamp that clamps said first through third circuit boards together.

6. (original) The stacked connection as recited in claim 1, wherein said third circuit board further comprises a second set of electrical conductors supported by said substrate of said third circuit board, further comprising a fourth circuit board, said fourth circuit board comprising a substrate supporting a set of electrical conductors, wherein said set of electrical conductors of said fourth circuit board are respectively electrically coupled to said first set of electrical conductors of said first circuit board by way of said first sets of electrical conductors of said second and third circuit boards connected in series.

7. (original) The stacked connection as recited in claim 1, wherein said first circuit board further comprises third and fourth sets of electrical conductors, said stacked connection further comprising fourth and fifth circuit boards having respective portions forming parts of said stack, said fourth circuit board comprising a substrate supporting first and second sets of electrical conductors, and said fifth circuit board comprising a substrate supporting a first set of electrical conductors, wherein said first set of electrical conductors of said fifth circuit board are respectively electrically coupled to said third set of electrical conductors of said first circuit board by way of said first set of electrical conductors of said fourth circuit board.

8. (original) The stacked connection as recited in claim 1, wherein each electrical conductor of said first set of said first circuit board comprises a metal trace and a pad on said surface of said substrate of said first circuit board, said metal trace being connected to said pad, and each electrical conductor of said second set of said first circuit

board comprises a metal trace embedded below said surface of said substrate of said first circuit board, a pad on said surface of said substrate of said first circuit board, and a via through said substrate of said first circuit board that electrically connects said metal trace to said pad.

9. (original) The stacked connection as recited in claim 1, further comprising a body of acoustically attenuative material, wherein the ends of said second and third circuit boards remote from said first circuit board are embedded in said body of acoustically attenuative material.

10. (original) A stacked connection comprising:

a first circuit board comprising a substrate and first and second sets of electrical conductors supported by said substrate, the electrical conductors of said first set extending beyond the electrical conductors of said second set, and each of said electrical conductors of said first and second sets having a respective termination portion that is exposed on one side of said substrate, said termination portions of said electrical conductors of said first set being displaced in a direction perpendicular to said substrate of said first circuit board relative to said termination portions of said electrical conductors of said second set;

a second circuit board comprising a substrate and a set of electrical conductors supported by said substrate of said second circuit board, each of said electrical conductors of said second circuit board having a respective termination portion that is exposed on one side of said substrate of said second circuit board, the termination portions of said electrical conductors of said second circuit board being respectively in contact with the termination portions of said electrical conductors of said first set of said first circuit board; and

a third circuit board comprising a substrate and a set of electrical conductors supported by said substrate of said third circuit board, each of said electrical conductors of said third circuit board having a respective termination portion that is exposed on one

side of said substrate of said third circuit board, the termination portions of said electrical conductors of said third circuit board being respectively in contact with the termination portions of said electrical conductors of said second set of said first circuit board.

11. (original) The stacked connection as recited in claim 10, wherein portions of said second and third circuit boards are bonded to respective portions of said first circuit board.

12. (original) The stacked connection as recited in claim 10, wherein portions of said second and third circuit boards are soldered to respective portions of said first circuit board.

13. (original) The stacked connection as recited in claim 10, further comprising a clamp that clamps said first through third circuit boards together.

14. (original) The stacked connection as recited in claim 10, wherein said substrate of said first circuit board comprises first and second steps, the termination portions of said electrical conductors of said first set being disposed on said first step and the termination portions of said electrical conductors of said second set being disposed on said second step.

15. (original) The stacked connection as recited in claim 10, wherein the termination portions of said electrical conductors of said first through third circuit boards are pads.

16. (original) The stacked connection as recited in claim 10, wherein said first circuit board further comprises a third set of electrical conductors supported by said substrate of said first circuit board, the electrical conductors of said second set extending beyond the electrical conductors of said third set, and each of said electrical conductors of

said third set having a respective termination portion that is exposed on said one side of said substrate of said first circuit board, said termination portions of said electrical conductors of said third set being displaced in a direction perpendicular to said substrate of said first circuit board relative to said termination portions of said electrical conductors of said first and second sets, further comprising:

a fourth circuit board comprising a substrate and a set of electrical conductors supported by said substrate of said fourth circuit board, each of said electrical conductors of said fourth circuit board having a respective termination portion that is exposed on one side of said substrate of said fourth circuit board, the termination portions of said electrical conductors of said fourth circuit board being respectively in contact with the termination portions of said electrical conductors of said third set of said first circuit board.

17. (original) The stacked connection as recited in claim 16, wherein said substrate of said first circuit board comprises first, second and third steps, the termination portions of said electrical conductors of said first set being disposed on said first step, the termination portions of said electrical conductors of said second set being disposed on said second step, and the termination portions of said electrical conductors of said third set being disposed on said third step.

18. (original) The stacked connection as recited in claim 10, wherein said first circuit board further comprises third and fourth sets of electrical conductors supported by said substrate of said first circuit board, the electrical conductors of said third set extending as far as the electrical conductors of said first set, and the electrical conductors of said fourth set extending as far as the electrical conductors of said second set, each of said electrical conductors of said third and fourth sets having a respective termination portion that is exposed on a side of said substrate of said first circuit board that is opposite to said one side of said substrate of said first circuit board, further comprising:

a fourth circuit board comprising a substrate and a set of electrical conductors supported by said substrate of said fourth circuit board, each of said electrical conductors of said fourth circuit board having a respective termination portion that is exposed on one side of said substrate of said fourth circuit board, the termination portions of said electrical conductors of said fourth circuit board being respectively in contact with the termination portions of said electrical conductors of said third set of said first circuit board; and

a fifth circuit board comprising a substrate and a set of electrical conductors supported by said substrate of said fifth circuit board, each of said electrical conductors of said fifth circuit board having a respective termination portion that is exposed on one side of said substrate of said fifth circuit board, the termination portions of said electrical conductors of said fifth circuit board being respectively in contact with the termination portions of said electrical conductors of said fourth set of said first circuit board.

19. (original) The stacked connection as recited in claim 10, further comprising a body of acoustically attenuative material, wherein the ends of said second and third circuit boards remote from said first circuit board are embedded in said body of acoustically attenuative material.

20. (original) A stacked connection comprising:

a first circuit board comprising a substrate and first and second sets of electrical conductors supported by said substrate, each of said electrical conductors of said first and second sets having a respective termination portion that is exposed on one side of said substrate;

a second circuit board comprising a substrate and first and second sets of electrical conductors supported by said substrate of said second circuit board, each of said electrical conductors of said first set of said second circuit board having a respective termination portion that is exposed on one side of said substrate of said second circuit board, and each of said electrical conductors of said second set of said second circuit board having a

respective first termination portion that is exposed on said one side of said substrate of said second circuit board and a respective second termination portion that is exposed on a side of said substrate of said second circuit board opposite to said one side of said substrate of said second circuit board, the termination portions of said electrical conductors of said first set of said second circuit board and the first termination portions of said electrical conductors of said second set of said second circuit board being respectively in contact with the termination portions of said electrical conductors of said first and second sets of said first circuit board; and

a third circuit board comprising a substrate and a set of electrical conductors supported by said substrate of said third circuit board, each of said electrical conductors of said set of said third circuit board having a respective termination portion that is exposed on one side of said substrate of said third circuit board, the termination portions of said electrical conductors of said set of said third circuit board being respectively in contact with the second termination portions of said electrical conductors of said second set of said second circuit board,

whereby said set of electrical conductors of said third circuit board are electrically connected to said second set of electrical conductors of said first circuit board by means of said second set of electrical conductors of said second circuit board.

21. (currently amended) An apparatus comprising:

first and second stacked connections and a spacer disposed between said first and second stacked connections, said first stacked connection comprising first and second circuit boards, said second stacked connection comprising third and fourth circuit boards, wherein said spacer comprises a first set of electrical conductors, said first circuit board comprises a second set of electrical conductors, and said fourth circuit board comprises a third set of electrical conductors, said electrical conductors of said second set being respectively electrically connected to said electrical conductors of said third set by way of said electrical conductors of said first set; and

an alignment pin that projects through respective aligned openings in said circuit boards of said first and second stacked connections and in said spacer.

22. (original) The apparatus as recited in claim 21, wherein said second circuit board is disposed between said first circuit board and said spacer, wherein said second circuit board comprises a fourth set of electrical conductors, said electrical conductors of said second set being respectively electrically connected to said electrical conductors of said first set by way of said electrical conductors of said fourth set.

23. (original) The apparatus as recited in claim 21, wherein within each of said first and second stacked connections, the circuit boards are bonded together.

24. (original) The apparatus as recited in claim 21, wherein within each of said first and second stacked connections, the circuit boards are soldered together.

25. (original) The apparatus as recited in claim 21, further comprising a clamp that clamps said circuit boards of said first and second stacked connections and said spacer together.

26. (canceled)

27. (currently amended) An apparatus comprising:

first, second and third stacked connections, a first spacer disposed between said first and second stacked connections, and a second spacer disposed between said second and third stacked connections, each of said first, second and third stacked connections comprising a respective plurality of circuit boards,

wherein said second spacer comprises a hole and each circuit board of said second stacked connection comprises a respective opening, further comprising a first alignment

pin anchored in said first spacer and projecting through said openings in said circuit boards of said second stacked connection and into said hole in said second spacer; and

a clamp that clamps said first through third stacked connections and said first and second spacers together, said clamp comprising a bolt, wherein each of said first through third stacked connections has an opening penetrated by said bolt, and each of said first and second spacers has a hole penetrated by said bolt.

28. (currently amended) The apparatus as recited in claim 27, further comprising:

a fourth stacked connection comprising a plurality of circuit boards, and

a third spacer disposed between said third and fourth ~~circuit boards~~ stacked connections, wherein said third spacer comprises a hole and each circuit board of said third stacked connection comprises a respective opening, further comprising a second alignment pin anchored in said second spacer and projecting through said openings in said circuit boards of said third stacked connection and into said hole in said third spacer.

29. (canceled)

30. (original) A stack of partially overlapping circuit boards, comprising:

a central circuit board comprising a substrate and first through fourth sets of electrical conductors, each of said electrical conductors having a termination portion, wherein the termination portions of said electrical conductors of said first and second sets are exposed on one side of said substrate, and the termination portions of said electrical conductors of said third and fourth sets are exposed on another side of said substrate opposite to said one side of said substrate;

first and second interior circuit boards each comprising a respective substrate and respective first and second sets of electrical conductors having termination portions, said termination portions of said first set of electrical conductors of said first interior circuit board being respectively in contact with the termination portions of said first set of

electrical conductors of said central circuit board, said termination portions of said second set of electrical conductors of said first interior circuit board being respectively in contact with the termination portions of said second set of electrical conductors of said central circuit board, said termination portions of said first set of electrical conductors of said second interior circuit board being respectively in contact with the termination portions of said third set of electrical conductors of said central circuit board, and said termination portions of said second set of electrical conductors of said second interior circuit board being respectively in contact with the termination portions of said fourth set of electrical conductors of said central circuit board; and

first and second exterior circuit boards each comprising a respective substrate and a respective set of electrical conductors, said set of electrical conductors of said first exterior circuit board being electrically connected to said second set of electrical conductors of said central circuit board by way of said second set of electrical conductors of said first interior circuit board, and said set of electrical conductors of said second exterior circuit board being electrically connected to said fourth set of electrical conductors of said central circuit board by way of said second set of electrical conductors of said second interior circuit board.

31. (original) The stack as recited in claim 30, wherein each of said termination portions comprises a pad.

32. (original) The stack as recited in claim 30, wherein each electrical conductor of said first set of said central circuit board comprises a metal trace embedded below the surface on said one side of said substrate of said central circuit board, a pad on the surface of said one side of said substrate of said central circuit board, and a via through said substrate of said central circuit board that electrically connects said metal trace to said pad.

33. (original) The stack as recited in claim 30, wherein each electrical conductor of said second set of said first interior circuit board comprises respective first and second pads on the surfaces of opposite sides of said substrate of said first interior circuit board, and a via through said substrate of said first interior circuit board that electrically connects said first pad to said second pad.